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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,482	04/25/2001	Gary B. Gordon	10980523-1	9824

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IP Administration
Legal Department, 20BN
HEWLETT-PACKARD COMPANY
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EXAMINER

BAKER, MAURIE GARCIA

ART UNIT	PAPER NUMBER
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1627

DATE MAILED: 09/30/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,482

Applicant(s)

Gordon et al

Examiner

Maurie G. Baker, Ph.D.

Art Unit

1627

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-35 is/are pending in the application
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

DETAILED ACTION

1. The instant case is a divisional of case 09/100,152. Claims 33-35 are pending; these claims correspond to Group II of the Restriction Requirement in the parent case.

Priority

2. Applicants are requested to amend the first line of the specification to update the status of the priority documents.

Claim Objections

3. Claims 34 and 35 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Note that the limitations directed to the type of chemical reaction which may take place on the chip are deemed to be non-limiting on the claimed "method of fabricating a plurality of individual chips". See also rejections below.

4. Additionally, claim 35 is objected to because of the following informalities: the claim does not end in a period, which is improper. See MPEP 608.01(m).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 33-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 33 is directed to a “method of fabricating a plurality of individual chips”. The claim goes on to recite “each for electronically addressing a matrix of sites, each site to which may be directed a chemical reaction” in the preamble of the claim. The method, however, comprises just two steps – “(a) preparing a plurality of said chips on a single silicon substrate, and (b) severing said single silicon substrate into said individual chips”. The limitations in the preamble (namely “each for electronically addressing a matrix of sites, each site to which may be directed a chemical reaction”) appear to merely recite the purpose of a process or the intended use of a structure and thus have not been accorded any patentable weight (see art rejection below). However, the claim is considered to be indefinite because these limitations are confusing. That is, the claims are unclear as to applicant’s intent. The limitations of “for electronically addressing a matrix of sites” and “to which may be directed a chemical reaction” are ambiguous in nature.

By the same token, claims 34 and 35, directed to limitations on the type of chemical reaction which may take place on the chip, are deemed to be non-

limiting on the claimed “method of fabricating a plurality of individual chips” because of the reasons set forth above. Claims 34 and 35 also fail to further limit the subject matter of previous claim 33. For these reasons, these claims are also considered to be confusing and ambiguous in nature.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Cozzette et al (US 5,200,051).

The following analysis is used for this rejection:

With respect to the limitation of “each for electronically addressing a matrix of sites, each site to which may be directed a chemical reaction” in the preamble of claim 33, this is deemed to merely recite the purpose of a process or the intended use of a structure and as such has not been given any patentable weight. See MPEP 2111.02: A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976);

and *Kropa v. Robie*, 187 F.2d at 152, 88 USPQ at 481. Also, “[i]n a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art.” *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); *In re Otto*, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963).

Claims 34 and 35 seemingly fail to further limit the subject matter of claim 33 but are also unclear (see above). For the purposes of this office action, any art that reads on the limitations of claim 33 is deemed to read on claims 34 and 35 as well.

Cozzette et al disclose a method for the “mass production of uniform wholly microfabricated biosensors” that are created by a “method for the microfabrication of electronic devices” that allows for “close control over the dimensional features of the various components and layers established on a suitable substrate” (see Abstract). The production method of Cozzette et al solves the previous problem of not being able to make biosensor electronic devices in a mass production mode (i.e. necessity of dicing the wafers before establishment of bilayers); see Section 2.2 of the patent, which describes the prior art, specifically, column 4, lines 7-20. Cozzette et al specifically describe “wafer level manufacturing procedures” (column 15, beginning on line 14). The reference discloses making a plurality of sensors (reading on the claimed “chips”) on a silicon substrate (see, for example, Section 5.1, especially column 21, lines 54-58). Cozzette et al discloses “dicing the wafer to yield individual glucose

sensors" (see Section 5.1.5, beginning in column 40, line 56), which reads on the instant step (b) in claim 33.

Lastly, it is noted that an embodiment of the sensors of Cozzette et al uses "oligonucleotides, polynucleotides, molecules of DNA, molecules of RNA, active fragments or subunits or single strands..." as the ligand receptor in the sensor; see patented claims 41 and 43 of Cozzette.

Status of Claims/Conclusion

9. No claims are allowed

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurie Garcia Baker, Ph.D. whose telephone number is (703) 308-0065. The examiner can normally be reached on Monday-Thursday and alternate Fridays from 9:30 to 7:00.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Wang, can be reached on (703) 306- 3217. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Maurie Garcia Baker, Ph.D.
September 24, 2002



MAURIE BAKER
PATENT EXAMINER